

2011 Landbird Monitoring Update

Why Monitor Bird Communities?

Bird communities were selected by park and network staff because they provide cost-effective information about ecological conditions of interest and they are well represented in the major terrestrial habitats in the parks. In partnership with the Klamath Bird Observatory, the Klamath Network began implementing our landbird monitoring protocol. The protocol is designed to yield important information about avian community composition, status of landbirds in a given year, and long-term population trends. In addition, our landbird monitoring effort contributes to and aligns with multiple regional and continental bird monitoring programs.

Objectives of the Project.

- 1) Monitor breeding landbird richness and density in relatively accessible areas of the parks
- 2) Co-sample habitat parameters to aid interpretation of landbird status and trends, and integrate bird and vegetation monitoring to further link landbirds to habitat status and trends
- 3) Determine status and trends in demographic parameters (productivity, adult survival, recruitment) for select landbird species at Oregon Caves National Monument

Parks Surveyed in 2011.

- This is the second year that we implemented the Landbird Monitoring Protocol at Lava Beds NM and Redwood NSP (the first was 2008).
- At Oregon Caves NM, an ecological monitoring station that includes both mist netting and area surveys was completed.

2011 Survey Results.

Lava Beds National Monument

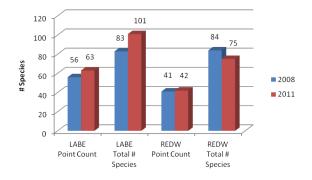
- 25 point count routes were surveyed between May 19th and June 5th and 63 species were observed with 50 meters of those routes. An additional 38 species were documented using other survey methods.
- The 5 most common species observed were: Spotted Towhee, Rock Wren, Blue-gray Gnatcatcher, Brown-headed Cowbird, and Audubon's Warhler
- 2 species were documented that are not currently on the certified species list in NPSpecies which included the Wild Turkey (*Meleagris gallopavo*) and the Eurasian Collard Dove (*Streptopelia decaocto*). Both are expanding their range in California.

Redwood National and State Parks

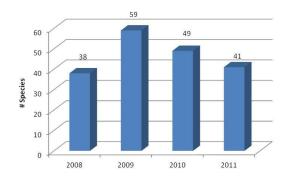
- 30 point count routes were surveyed between June 11th and June 28th and 42 species were documented within 50 meters of those routes. Beyond the point count routes an additional 32 species were detected.
- The 5 most common species observed were: Pacific-slope Flycatcher, Chestnut-backed Chickadee, Pacific Wren, Wilson's Warbler, and Stellar's Jay.
- We added 2 additional listening stations to route RW02 which initially had only 4 stations. This ensures each route has at least 6 listening stations which will help ensure consistency for future data analysis.

Oregon Caves National Monument

 The ecological monitoring station was run 14 times during spring breeding and fall dispersal/migration season. 41 species were detected with 24 species captured using mist nets and 17 species detected during area searches.



Number of species documented within 50 meters of a point count and total number of species observed using all sampling methods at LABE and RNSP.



Number of Species Observed at ORCA from 2008-11.

Future Work.

The KLMN landbird monitoring protocol is designed to sample 2 parks per year using point count methods. In addition, an ecological monitoring station is implemented at Oregon Caves NM every year. Worked expected to be completed over the next 2 years includes:

- 2012 Implement monitoring at Lassen Volcanic NP, Oregon Caves NM (mist net), and Whiskeytown NRA.
- 2013 Implement monitoring at Crater Lake NP and Oregon Caves NM (mist net & point counts)

More Information

For complete information about this year's sampling please read the 2011 annual landbird monitoring report. All completed reports are made available at the KLMN web site at: http://science.nature.nps.gov/im/units/klmn/Monitoring/vs/Landbird/VS Landbirds.cfm